

REMARKS

Claims 3 and 12 are amended herein. Claims 1-53 are pending and under consideration.

The present amendment to claim 12 overcomes the objection thereto.

The rejections under 35 U.S.C. §§102 and 103 are respectfully traversed.

Independent claim 1 recites that the metal wiring layers externally radiate some of the heat generated from the heaters. Present FIG. 4 illustrates this feature, as an example.

The Examiner relies upon layers 180 and 181 of Fasen as corresponding to this feature. However, these layers are covered by passivation layer 222 and cavitation layer 224 and thus cannot radiate heat externally. Fasen, FIG. 18.

Furthermore, claim 2 depends from claim 1 and recites heat radiating parts to which the metal wiring layers are connected. The Examiner relies upon the external lead 270. However, there is no disclosure that the lead 270 radiates heat. Instead, the reference discloses that the lead 270 is connected to the gate 110. Fasen, col. 12, ln. 49-52.

Still further, claim 3 depends from claim 1 and recites that the heat radiating parts are dimensioned to maximize their surface areas. There is no disclosure regarding the dimensions of the lead 270.

Also, dependent claim 5 recites the metal wiring layers transfer the heat generated from the heating parts to the ink surrounding the plural heaters to pre-heat the ink. Fasen discloses that the uncovered section 202 functions as a heating resistor 209 to cause ink bubble nucleation. Fasen, col. 10, ln. 64-67. However, there is no disclosure regarding pre-heating the ink.

Cornell and Silverbrook do not overcome these deficiencies in Fasen and are not relied upon by the Examiner to do so.

Accordingly, withdrawal of the rejections is requested.

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.


Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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